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ABSTRACT

Since the Ontario (Canada) legislation in 1975 that formalized collective bargaining for teachers, public concern has focused on collective bargaining as the possible cause of recent enrollment declines and increases in schooling costs. However, according to Ontario provincial statistics, enrollment in elementary schools had begun to decline before the legislation and in secondary schools at least 2 years afterwards. If some of the bargaining provisions had increased costs by protecting teachers' jobs, the effects should be reflected statistically as changes in the pupil-teacher ratio. A comparison of government figures, though, shows that reductions in pupil-teacher ratios occurred before the introduction of formal collective bargaining and in the midst of increasing enrollments. The raise in average annual salaries of Ontario teachers has actually been furthered by the generally increasing experience and qualifications of the teaching force--attributable to declining enrollments, fewer entry-level teachers, and increasing seniority of remaining teachers. Overall, the costs of negotiated salaries since 1975, though increasing substantially, show gains commensurate with the Ontario work force as a whole, so that collective bargaining can be said only to have prevented deterioration in the relative level of salaries. (JW)

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COLLECTIVE BARGAINING: Its Impact on Educational Cost

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by

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COLLECTIVE BARGAINING: Its Impact on Educational Cost

1.0 Introduction

The advent of formalized collective bargaining in education has not been welcomed with universal enthusiasm. In Canada as in the United States, field and academic opinion has tended to be divided on the issue. On the one hand are those who see formalization of the process as a means of providing a controlled and more rational process of reconciling the needs of the public, administrators and the profession. On the other hand are those who see the formalization of collective bargaining as yet another step in the "takeover" of public education by an increasingly militant profession. The concerns of this second group tends to be increased in jurisdictions where declining enrolments and the threat of teacher layoffs have led to suggestions that the collective bargaining process will be used primarily as a means of protecting the private concerns of the profession to the neglect of the general interest. The following is typical of the concerns voiced:

> At a time when the education system is burdened with all kinds of problems, collective bargaining in its present format only intensifies the struggle for limited resources, pitching one party against the other at the expense of quality of education and the future of our youth.
>
> (Lam, 1981)

The problems of collective bargaining in a time of declining enrolments are aggravated by problems of the general economic context in which bargaining takes place, including declining public revenues and shifting priorities in public expenditure patterns.

Whilst the number of variables involved in making a thorough-going analysis of collective bargaining in education makes the topic inappropriate for a single paper, it is possible to make an initial assessment of the impact of collective bargaining on a limited number of issues. This assessment may be couched in the

form of the question, "What evidence is there that the introduction of formalized collective bargaining has had an impact on factors effecting the cost of education and the costs themselves during the period of declining enrolment?"

It may be argued that although by no means unique in Canada insofar as either collective bargaining structures or declining enrolments are concerned, experience in the province of Ontario provides a useful basis for examining the question. Enrolments at the elementary level, although not at the secondary level had begun to decline before the enactment of the legislation which provided for formalized collective bargaining at both levels in the system. It is therefore possible to examine the impact of the legislation from a "before/after" perspective.

Before examining the question, however, it is desirable to provide a brief description of elementary and secondary enrolments in the Province and the structure within which collective bargaining takes place.

2.0 Declining Enrolments

Table 2.1 provides details of actual enrolments in the elementary and secondary school systems.

TABLE 2.1

Enrolment in Elementary and Secondary Schools in Ontario 965-1980

Year	ELEMENTARY Pupils	ELEMENTARY Annual % Charge	SECONDARY Pupils	SECONDARY Annual % Charge
1965	1,320,043	3.3	418,738	5.9
1966	1,364,871	3.4	436,026	4.1
1967	1,405,052	2.9	463,736	6.4
1968	1,430,590	1,8	500,807	8.0
1969	1,456,117	1,8	530,679	6.0
1970	1,465,488	0.6	556,913	4.9
1971	1,456,840	-0.6	574,520	3.2
1972	1,445,101	-0.8	583,013	1.5
1973	1,422,885	-1.5	585,725	0.5
1974	1,404,839	-1.3	589,650	0.7
1975	1,389,478	-1.1	605,160	2.6
1976	1,360,085	-2.1	613,055	1.3
1977	1,329,396	-2.3	613,830	0.1
1978	1,290,337	-2.9	611,668	-0.4
1979	1,258,761	-2.4	600,084	-1.9
1980	1,240,274	-1.5	586,261	-2.3

Source: Ontario Ministry of Education, Education Statistics Ontario, 1980.

The table shows that elementary population peaked in 1970 and began to decline at an accelerating rate throughout the following decade. The secondary school population peaked in 1977 and began to decline thereafter.

The decline is projected to continue in both elementary and secondary sectors. According to the Commission on Declining Enrolments in Ontario (1978) the decline is projected to continue until 1986 at which time enrolment will begin to increase until the end of the century. At the secondary level the projected decline will continue throughout the 1980's until 1992 when it too will begin to increase again.

The decline in elementary and secondary enrolments during the decade of the 70's was real. Furthermore the publicity provided by both Government and media contributed to a crisis-like atmosphere which it may be presumed heightened the concern of teachers, administrators and public. Certainly as will be seen later, collective agreements reached in the period 1975-1981 reflected the professional concern.

3.0 Collective Bargaining

Collective bargaining in salary matters had long been in existence in Ontario. Up until 1975, however, Ontario was the only Canadian province that lacked legislation governing negotiations between school boards and teachers.

The School Boards and Teachers Collective Negotiations Act of 1975, also known as Bill 100 provided in Section 9 that "Negotiations shall be carried out in respect of any term or condition of employment put forward by either party." The apparent freedom conveyed by the Act is limited, however, by the condition that no term of an agreement may conflict with existing legislation. Since existing legislation defines the rights and duties of trustees, teachers and administrators, there are in fact limitations to the scope of what may be negotiated. These acts and regulations tend to provide a limit to the extent to which "Management Rights" may be eroded. The Act also legalized both strikes and lockouts.

The Act also included provision for the creation of a Commission to monitor the process of bargaining. The Education Relations Commission provides mediators, fact-finders, arbitrators, supervises strike votes and advises the Minister with respect to the progress of negotiations. It has also the responsibility for maintaining a continuous flow of information for the use of bargaining groups and other interested parties.

The structure for collective bargaining instituted in 1975 would appear to have provided the opportunity for teachers facing the uncertainties of declining enrolments to negotiate terms and conditions of employment which would protect their employment interests. They were also provided with a weapon, strike action, which could increase their power at the negotiating table.

4.0 Collective Bargaining Since 1975

Costs associated with collective bargaining may be conceived as arising out of 1) The costs associated with the bargaining process itself. 2) The costs associated with improvements in working conditions. 3) The costs of the compensation package in terms of salaries and fringe benefits.

This paper will not address the questions associated with costs of the bargaining process itself.

Since costs associated with the compensation package have a direct influence on per pupil cost, consideration of salaries and fringe benefits will be delayed until after a discussion of working conditions. Working conditions may influence cost directly or indirectly through the pupil-teacher ratio. As a result the discussion of working conditions will be undertaken in two stages. The first stage will consist of a brief examination of the trends with respect to clauses negotiated as part of collective agreements. The second stage will consist of the examination of the effect of such classes on pupil-teacher ratios.

The following sections will attempt to identify the major trends in working conditions negotiated since 1975. It should be noted that although Roman Catholic Separate Elementary Schools are provided for in the publicly financed system in Ontario and are governed by Bill 100, they have not been identified in the discussion for the sake of simplification? Since each collective agreement is

different in both form and content the attempt will be made to deal with only those conditions of work which are directly related to the major issue under examination:- costs and declining enrolments and include

4.1 Leave Provisions

4.2 Class Size Provisions

4.3 Pupil-Teacher Relations Provisions

4.4 Teacher Workload Provisions

4.5 Surplus Redundancy Provisions

Data for this section unless otherwise noted is derived from Education Relations Commission, Historial Analysis of Collective Agreements 1975-76 to 1981-82, Monograph #26, September 1982, Toronto.

4.1 Leave Provisions

Generally speaking leave provisions are for school boards a relatively inexpensive method of providing job security. Whilst substantial leaves normally involve a stipend, extended leaves of absence, leaves to serve on professional association, paternity and maternity leave are usually low cost. In 1975, 83 percent of elementary and 88 percent of secondary agreements contained sabbatical leave provisions. This proportion was virtually unchanged in the 1981 agreements and thus may be assumed to have affected cost minimally. Furthermore there has been an increase in the number of collective agreements which provide a deferred compensation-leave clause. A typical example of such a clause provides that a teacher who accepts a reduced salary for a period of five years is given an absence with pay for the sixth year. This type of arrangement is advantageous for both parties to the agreement.

Provision for other forms of leave increased substantially. For instance, provisions for extended leaves of absence increased from 57.9 percent

of the elementary agreements in 1975 to 73.6 percent by 1981-82. In the secondary agreement provisions increased from 56.6 percent in 1975 to 79.1 percent in 1982.

4.2 Class Size Provisions

Clearly reduction of class size is a factor effecting the number of teachers and therefore the cost of education. Negotiated class size provisions appear either in the form of guidelines or are mandatory provisions. It might be expected therefore that in the interests of job security teachers would seek to increase both the incidence of such clauses and their mandatory nature.

In 1975, 15.8 percent of elementary and 19.7 percent of secondary agreements contained class size provisions. By 1981-82 the percentage of elementary agreements had increased to 29.2 percent and of secondary agreements to 37.3 percent. The proportion of mandatory provisions in the elementary school rose from 616 percent in 1975 to 12.5 percent in 1981-82 and from 7.9 to 14.9 percent in secondary schools.

Examination of an analysis of representative clauses relating to the class size issue (Education Relations Commission, 1980) reveals that the most frequently occurring maximum is between 25-30 students in both elementary and secondary (academic) classes. Discussion of the effect of such provisions will be presented later in this paper.

4.3 Pupil-Teacher Ratios

Control over overall pupil-teacher ratios may be viewed as another means of safeguarding teaching positions. As may be expected the number of agreements containing such ratios has increased since the introduction of formalized bargaining procedures. In 1975-76, 22.4 percent of elementary and 31.6 percent

of secondary agreements provided for pupil-teacher ratios. By 1981-82, 48.7 percent of elementary and 68.7 percent of secondary agreements contained provisions. Furthermore at the elementary level the proportion of such provision as guidelines had dropped from 2.7 in 1975-76 to 1.4 in 1981-82. At the secondary level the proportion increased from 1.3 to 6.0 percent.

4.4 Teacher Workload Provisions

Many agreements combine teacher workload provisions in terms of the number of hours or periods to be worked with classes or class size and pupil-teacher ratio.

There has been a substantial increase in the number of contracts providing limitations to teacher workload. The number of elementary agreements providing for release time for teachers increased from 14.5 percent in 1965 to 26.4 percent in 1981-82. At the secondary level the percentage increased from 35.5 percent to 64.4 percent. Perhaps the most significant change was in the number of contracts which provided for noon-hour supervision release. In 1975 there were no agreements at the elementary level which provided for noon-hour supervision conditions. By 1981-82, 40 percent of agreements made such provision.

The steady increase in the number of contracts providing release time would of necessity be reflected as an increase in the number of teachers required to serve a given population of students and therefore the impact of such clauses must be associated with discussion of pupil-teacher ratios in section 5.

4.5 Surplus Redundancy Provisions

Whilst surplus redundancy provisions tend to determine the pattern of layoff, their effect on educational cost is indirect. The pattern of layoffs tends to determine who will be left in the system and thus influence overall

placement on the salary grid. Many view surplus redundancy provisions together with class size and pupil-teacher ratio provisions as being particularly damaging to a school board's flexibility and control of resources.

In 1975-76, 59.4 percent of elementary agreements and 51 percent of secondary agreements contained provision for surplus/redundancy. By 1981-82, 65 percent of elementary and 65 percent of secondary agreements contained such provision. In virtually all agreements during the period, seniority or a combination of seniority and qualifications is expressed as the basis of determining layoff. No agreements made between 1975 and 1977 at either elementary or secondary level included teaching effectiveness as a criterion. In the 1977-78 agreements 13.5 percent of elementary and 25 percent of secondary agreements introduced effectiveness criterion. This proportion remained relatively stable until 1981-82 declining to 12.3 percent in the case of elementary but increasing to 27.7 percent in the case of secondary agreements. The decline reflects perhaps the difficulty of arriving at acceptable measures of teacher effectiveness.

4.6 Summary

The brief description suggests that since the introduction of formalized collective bargaining in Ontario there has been a steady increase in the number of provisions in collective agreements regarding working conditions which, in a time of declining enrolments, could be seen as having the primary purpose of protecting jobs. The working conditions discussed have the potential for effecting cost, particularly if those conditions negotiated maintain employment of teachers at a level higher than that which would be otherwise desired or deemed appropriate by trustees and administrators. It is argued that the effect of such negotiated conditions would be reflected as changes in pupil-teacher ratios.

5.0 Cost - Effects of Negotiated Agreements

It has been suggested that the major impact of collective bargaining will be upon pupil-teacher ratios and salaries. It is the purpose of this section to discuss the relative changes in these two variables before and after the introduction of formalized collective bargaining in 1975.

Before doing so, however, it is worth noting that the discussion must be subject to limitation. The first such limitation is inherent in the use of aggregated data in that the experience of an individual board might be so different as to warrant alternative conclusions to those which may be drawn after discussion of the average data. The second limitation is the degree of refinement in analysis warranted by the data. Since the data used in the following section is derived from different sources, it is to be expected that definitional and reporting period differences would not justify more than a general description of trends.

It is difficult to separate the cost effect of the provision of short-term paid leaves of absence for sickness or personal reasons from the effect of class size, pupil-teacher ratio and workload conditions. In some agreements the cost of such absences is accommodated within the overall teacher workload,in others additional teachers are hired. To the extent that these costs cannot be related to the full time or full time equivalent teacher ratio, they must be seen as part of the unexplained increased pupil cost discussed in Section 6 of this paper.

As has been noted, class size/pupil-teacher ratio provisions have increased substantially both in the incidence of such clauses and in their mandatory nature. Perhaps the most effective way of assessing the impact of such clauses is to examine the actual pupil-teacher ratios which obtained during this period. Table 5.1 provides details of pupil-teacher ratios at the elementary and secondary level during the period.

TABLE 5.1

Pupil-Teacher[1] Ratios in the Ontario Elementary and Secondary School System 1968-1980

	ELEMENTARY		SECONDARY	
Year	Full Time Equivalent	Full Time Equivalent	Full Time Equivalent	Full Time Equivalent
1968	26.2		16.6	
1969	25.3		16.4	
1970	24.7		16.5	
1971	25.0	23.4	16.7	16.5
1972	24.9	23.3	16.9	16.7
1973	25.1	23.4	17.3	17.0
1974	24.8	23.0	17.2	16.9
1975	23.9	22.0	17.4	17.1
1976	23.5	21.6	17.3	17.0
1977	23.4	21.3	17.3	16.9
1978	23.6	21.1	17.4	16.9
1979	23.5	21.0	17.4	16.7
1980	23.6	20.8	17.3	16.6
1981	23.2	20.5	17.1	16.4

Source:- Ontario Ministry of Education, Education Statistics, Ontario, 1980.

[1]Teachers include all Principals, Vice-Principals, Heads of Departments and other non teaching educational staff employed in the school.

The table shows that insofar as elementary pupil-teacher (full time) ratios are concerned the most significant reduction occurred between 1968 and 1975 when it dropped from 26.2:1 to 23.9. This reduction occurred during the early years of the decline but prior to the introduction of formal collective bargaining. The pupil-teacher ratios for each of the years thereafter exhibit considerable stability even though enrolments continued to decline.

The decline in full time equivalent pupil teacher ratios at the elementary level, particularly in the second half of the decade, reflects an increase in the proportion of teachers employed on a part-time basis. As has been noted there has been a steady increase in collective agreements at the elementary level which provide for release time for elementary school principals as well as

preparation time for elementary school teachers. This may well be one administrative solution to the need to keep class size ratios within the limits negotiated through the collective bargaining process, but may also be an administrative response to the problem of maintaining specialized programs in a time of declining enrolments. Consequently the impact of the declines from a collective bargaining viewpoint is not clear. What is reasonably clear, however, is that the decline had a significant impact on cost per student. Since the decline is in the order of 10 percent, during the 1973-80 period it is reasonable to suggest that the per student cost will have increased by a similar amount during that period ceteris paribus.

The picture is similar with respect to secondary (full time) pupil-teacher ratios. The major reductions in pupil-teacher ratios were achieved at a time when enrolments were still increasing and prior to the introduction of formal collective bargaining. Furthermore the beginning of the enrolment decline, although occurring during the period of collective bargaining is not reflected in a reduction in pupil-teacher ratio insofar as full time teachers are concerned.

It will be noted that while the full time equivalent pupil-teacher ratio at the secondary level is lower than the full time pupil-teacher ratio, there is little evidence of significant change either as the result of declining enrolments or of collective bargaining.

5.2 Surplus-Redundancy Provisions

To some extent, the effect of surplus-redundancy provisions would be manifest in the actual pupil-teacher ratios discussed above. In addition, it may be argued that the negotiation of clauses which require board to layoff on the basis of seniority and qualifications rather than teaching effectiveness tends to lead to a preponderance of teachers at higher positions on the salary grid.

There can be no doubt that this argument has merit. The question may be raised, however, as to whether the placement problem is the result of negotiated agreements or whether it might occur naturally.

Table 5.2 provides details of acquisitions and withdrawals to the Ontario teaching force in 1979-80.

TABLE 5.2

Details of Acquisitions and Withdrawals, Ontario Teaching Force 1979-80

	ELEMENTARY	SECONDARY
a) Number of full time teachers, Sept. 30, 1979	53,549	34,514
Number of full time teachers, Sept. 30, 1980	52.653	33,840
Reduction in size of teaching force	896	673
b) WITHDRAWALS		
Retirements	600	389
Illness	114	63
Death	39	40
To teach in private schools, colleges, schools and Faculties of Education	735	85
To supervisory administrative positions	377	204
	1,355	981
c) ACQUISITIONS		
Graduates from Ontario Teacher Education Programs	1,083	544

Source:- Ontario Ministry of Education, Education Statistics, Ontario, 1980, (p. 84).

The table shows that the overall decline in the total teaching force resulting from declining enrolments was more than accommodated for by what may be described as "natural" attrition of the teaching force in the form of retirement, sickness and alternative employment in the educational system. The relatively small number of new graduates hired directly from the teacher training institutions is also worthy of note.

The structure of the teaching force suggested by this table will have an effect on costs by increasing the average salary. The average salary will tend to increase because of the aging of the teaching force and also because the relatively small number of new entrants to the teaching force at minimum salary will not serve to depress the average as was the case during the time of increasing enrolments.

Clearly the increase in average salary will be a more critical factor in influencing cost in those jurisdictions where declining enrolments have resulted in layoffs of less senior teachers and no hirings of new teachers.

5.3 Teachers' Salaries

One of the most difficult problems in assessing the impact of collective negotiations on teachers' salaries is that of separating the effects of the negotiations themselves and the effects of the changing levels of experience and qualifications. For instance, even if the negotiated salary grids remained constant over time, increases in experience and improvements in qualifications would result in increasing average salaries.

During the last half of the decade both experience and qualifications changed in Ontario. Between 1976-77 and 1980-81 the average age of elementary teachers increased from 35 to 37 and of secondary teachers from 38 to 40 [Statistics Canada, (1977) and (1982)] reflecting primarily the reduction in the number of new teachers entering the force. During the same period qualifications also increased. In 1976-77, 56.5 percent of elementary and 20 percent of secondary teachers were reported as having no degree (Statistics Canada 1977). By 1980-81 the proportion reporting no degree had dropped to 37 percent for elementary teachers and to 14 percent at the secondary level (Statistics Canada 1982). Both sets of factors suggest that there would have been a considerable increase in average salary even had there been no negotiated increase.

In fact, average annual teacher's salary in Ontario increased between 1976-77 and 1980-81 from $16,270 to $24,270 at the elementary level and from $20,730 to $28,970 at the secondary level [Statistics Canada (1977) and (1982)] increases of 49 percent and 39 percent respectively. Such increases suggest that negotiated salaries increased substantially over the four year period by an annual 12½ percent and 10 percent depending on level of teaching assignment.

Since average salaries reflect the experience and qualification factors as well as the effect of collective bargaining, it is appropriate to examine salaries from an approach which reflects negotiations.

This second approach is to examine the movement of salary levels for the period as they are reflected by the salary of a teacher with the same qualifications and experience. Table 5.31 reports the median minimal salary of teachers in Ontario with minimum qualifications (basic three year degree and one year of teacher training) according to collective agreements.

TABLE 5.31

Median Minimum Salaries for Minimally Qualified Teachers in Ontario 1975-76 to 1981-82

	ELEMENTARY		SECONDARY	
Year	Salary	Annual % Charge	Salary	Annual % Charge
1975-76	$12,700		$12,470	
1976-77	13,805	9	13,717	8
1977-78	14,941	8	14,650	10
1978-79	15,541	3	16,284	11
1979-80	16,865	8	17,265	6
1980-81	18,325	9	18,128	5
1981-82	20,565	12	20,400	12

Source:- Education Relations Commission, Historical Analysis of Collective Agreement 1975-1976 to 1981-1982, Monograph #28, Toronto, E.R.C. 1982.

The rates of increase for median maximum elementary and secondary teachers with minimum qualifications are as follows in table 5.32.

TABLE 5.32

Median Maximum Salaries for Minimally Qualified Teachers in Ontario 1975-76 to 1981-82

	ELEMENTARY		SECONDARY	
Year	Salary	Rate of Increase	Salary	Rate of Increase
1975-76	$24,400		$17,833	
1976-77	24,500	9	19,701	10
1977-78	26,165	7	21,278	8
1978-79	27,525	5	22,554	6
1979-80	29,750	8	24,130	7
1980-81	32,370	9	26,157	8
1981-82	36,180	11	29,348	12

Source:- Education Relations Commission, Historical Analysis of Collective Agreement 1975-1976 to 1981-1982, Monograph #28, Toronto, E.R.C. 1982.

The tables show that the overall rate of increase of 49 percent for elementary minimum (Table 5.31) is the same as that for elementary maximums while the overall increase at secondary maximums at 51 percent is 1 percent less than secondary minimums (Table 5.31).

Tables 5.31 and 5.32 shows that negotiated salary for a teacher at maximum or minimum with minimum qualification levels increased by some 9 or 10 percent annually over the period. When the increases in negotiated rates are compared with average salaries it becomes clear, particularly at the elementary level that the rate of increase in average salary reflects the increase in qualifications and experience alluded in the discussion above. For secondary teachers the close similarity in rates of increase reflects the higher degree of stability in qualification and experience.

For the purpose of this paper, however, the concern is not so much with the increase itself but with the effect of collective bargaining on the rates of increase.

At least one way of examining whether or not teachers used formalized collective bargaining to pursue an aggressive salary policy to improve their salaries is to compare the gains of teachers with those of the working force at large.

Table 5.33 provides details of the average weekly earnings in Ontario for the period 1974-1981.

TABLE 5.33

Average Weekly Earnings (Industrial Composite) in Ontario 1974-1981

Year	Weekly Earnings	Annual % Charge
1974	$178	
1975	203	14
1976	228	12
1977	249	9
1978	265	6
1979	288	9
1980	317	10
1981	355	12
	AVERAGE	10.2

Source:- Ontario Ministry of Treasury and Economics, Ontario Statistics, 1982, Toronto, 1982.

It should be noted that direct comparison between table 5.31 and 5.32 and table 5.33 is not possible. Tables 5.31 and 5.32 report salary data for the school year whereas table 5.33 reports on a calendar year basis.

Nevertheless in terms of average change the two sets of data demonstrate a degree of closeness which suggests that while teachers did make substantial gains in negotiated salaries during the period of formalized collective bargaining, their gains were commensurate with those of the working force as a whole.

Stager (1978) has provided an analysis of teachers salaries in Ontario prior to 1975. After comparing the level of teachers salaries with other wages and salaries in Ontario since the conclusion of the second world war he was able to conclude.

> The overall effect of these fluctuations was to leave secondary school teachers in 1975 at about the same relative salaries they had in 1951 at the beginning of the prosperous period. Elementary school teachers fared somewhat better: they were in 1975 at the same relative salaries received in 1957-58. (p. 23)

It would appear that in spite of the introduction of formalized collective bargaining in 1975 there is little evidence that teachers have managed to improve their relative positions with respect to salaries. Furthermore in the light of the wage controls which have been applied to the public sector in Ontario for the years 1983-1985, it is unlikely that collective bargaining will provide a means of further improving their position.

In terms of total financial compensation it is necessary to include a discussion of fringe benefits not covered in the discussion of paid leaves and benefits conveyed by workload limitations.

5.4 Fringe Benefits

In addition to fringe benefits in the form of paid leaves of absence for sickness and personal reasons collective agreements normally provide for employer contributions to two additional forms of fringe benefits: insured benefits such as extended health benefits, drug plans, dental plans, etc., and non insured benefits including unemployment insurance, Workmens Compensation and Canada Pension Plan. Employer contributions to non insured benefits tend to be legislated and therefore not negotiable. Collective bargaining has resulted both in increasing the number of contracts which provide for participation of employer and employee and increases in the proportion of insured benefits subsidized by the employer.

In 1975-76 Agreements no provisions for subsidization existed for dental plans in 40.5 percent of agreements, for extended health in 21 percent and for long term disability insurance in 58.5 percent. By 1981-82 the proportion had fallen. Only 7.0 percent of agreements had no dental plan provisions, 10 percent had no extended health plan and 23 percent had no provisions for long term disability insurance.

Table 5.41 shows the growth in the number of agreements providing for complete subsidization of the varyirg insured benefits.

TABLE 5.41

Proportion of Negotiated Agreements Providing
100 Percent Employer Contribution to Fringe Benefits
1975-1976 and 1981-1982

	ELEMENTARY		SECONDARY	
	1975-76	1981-82	1975-76	1981-82
Ontario Hospital Plan	23.7	30.6	25.0	34.4
Extended Health Care	26.3	37.5	21.1	49.3
Dental Plan	9.8	20.8	5.3	28.4
Long Term Disability	6.6	11.1	9.2	11.9
Group Life	26.3	50.0	22.4	55.2

Source:- Educational Relations Commission, Historical Analysis of Collective Agreements 1975-1976 to 1981-1982. Monograph #26, Toronto, 1982.

The table shows that in most cases the number of agreements providing for total subsidization has doubled since the introduction of formal collective bargaining, although it is worth noting that the total proportion of agreements making such provision is still less than half of the total number of agreements.

For the purpose of this paper it is assumed that any increase in subsidization of fringe benefits represents a gain for teachers brought about by the negotiating process. Obviously this is a strong assumption. Nevertheless an estimate of the impact of the change in fringe benefits using this assumption will not underestimate the effect.

It is not possible to provide any exact estimate of the cost of fringe benefits for the period before and after the introduction of collective bargaining. The Education Relations Commission provides data for the period after the introduction. According to a monograph (1982) published by the Commission average overall staff compensation for 1981-82 was $30,481 of which $659 or 2.1 percent was for insured benefits and $691 or 2.2 percent was for other benefits (p. 11). Thus fringe benefits accounted for just over 4 percent of staff compensation. Statistics Canada (1979) reported that for 1976; fringe benefits accounted for 4.8 percent of salaries and fringe benefits in Ontario. Commonsense suggests that the substantial increase in fringe benefits negotiated since 1975 would be reflected in a higher proportion of total compensation but without precise information using the same basic definitions comparisons become almost impossible.

On the other hand, the proportion of total compensation provided in fringe benefits will depend to a large extent on the relative cost changes of fringe benefits and salaries. The price levels of non insured benefits in Ontario tend to be held down since they are part of the general social service package provided by Provincial and Federal Governments.

Furthermore since 1981 fringe benefits received as part of compensation have been treated as taxable under the Canadian income tax system, thus providing some disincentive to a heavy concentration on fringe benefits as a method of increasing real salaries.

The contribution of school boards to Teachers Superannuation is nominally 7 percent, although to date the Provincial Government has made this contribution directly and thus it does not appear as a school board expenditure.

6.0 Discussion and Conclusion

It is not the purpose of this paper to provide an analysis of the increasing per pupil expenditures for elementary and secondary education during the decade of the seventies, but rather to examine what, if any, effect the introduction of collective bargaining had on such expenditures.

Table 6.1 suggests a marked increase in per pupil expenditures took place after the introduction of collective bargaining in 1975 with a substantial increase marking the first year. The rate of increase is particularly marked for the elementary level.

To some extent the sharp increases for 1975 and 1976 reflect the sudden jump in all wages and salaries which followed the expiration of mandatory wage controls implemented by the Federal Government in 1973-74 and therefore cannot be held as representative. Nevertheless, table 6.1 shows that the increase in per pupil expenditure between 1976 and 1980 has been 52.4 percent at the elementary level and 42.5 percent at the secondary level. The average annual rate of increase has been 13.1 percent at the elementary level and 10.6 percent at the secondary level.

The analysis of teachers' salaries suggests that some 9-10 percent annually of the annual increase in per pupil expenditure can be accounted for by negotiated increases in salary level, although a further 2-3 percent can be accounted for by increases in average salary which reflect the increasing qualification and experience level particularly of elementary school teachers. Furthermore as table 5.2 suggested there is little evidence that negotiated conditions of surplus and redundancy average have led to placements at higher levels on the salary grid than might be warranted anyway in a time of declining enrolments. The reduction in the size of the teaching force as was suggested has been more than

offset by natural attention of the teaching force. The comparison with Provincial average wages and salaries suggested that, at best, collective bargaining has not allowed deterioration of the relative level of teachers' salaries. It is arguable to what extent deterioration would have taken place without formal collective bargaining.

TABLE 6.1

Elementary and Secondary Per Pupil Expenditures by Ontario School Boards 1971-1980 (Calendar Year)

Calendar Year	ELEMENTARY Expenditure	ELEMENTARY Annual % Charge	SECONDARY Expenditure	SECONDARY Annual % charge
1971	756		1,303	
1972	826	9	1,424	9
1973	877	6	1,479	4
1974	988	13	1,616	9
1975	1,217	23	1,814	12
1976	1,433	17	2,127	17
1977	1,495	4	2,344	10
1978	1,765	18	2,517	7
1979	1,945	11	2,752	9
1980	2,184	12	3,032	10

Source:- Ontario Ministry of Education, Education Statistics Ontario, 1981, p. 20.

Nor can it be argued that "feather-bedding" which would be manifested in the form of sharply reduced pupil-teacher ratios have been responsible for the increase in per pupil cost. It was noted in Section 5.1 that the sharpest declines in pupil-teacher ratio occurred before the introduction of collective bargaining in 1975 and that the period since 1975 has been characterized by relative stability insofar as full time pupil-teacher ratios are concerned. At the elementary level there has been close to a 10 percent decline in full time equivalent pupil-teacher

ratios reflecting the increase in part-time teachers. It cannot be ascertained to what extent this decline has been the result of administrative attempts to maintain programs at a time of declining enrolments and what has resulted from collective bargaining designed to limit class size and workloads of full time teachers. The examination of clauses included in negotiated contracts suggests, however, that the class sizes of 25-30 which appear to be the norm are educationally defensible and hardly consitute strong evidence of "feather-bedding". However, if the entire decline can be attributed to forceful collective bargaining designed to improve teachers' working conditions, the effect as noted above has been in the order of 2 percent per year on per pupil salary costs.

The combined effect of increases in teacher salaries and reduction in pupil-teacher ratio suggests an annual average increase in the order of 14-15 percent. This figure is, of course, greater than the increase in per student cost. The principal explanation for the discrepancy lies in the fact that this analysis has focussed only on the salary component of per pupil cost which accounts for some 80 percent (Statistics Canada 1981) of total cost.

Nevertheless the discussion provided in this paper suggests while per student costs in Ontario have increased sharply since the introduction of formal collective bargaining in 1975, it would be difficult to justify the position that the gains of the profession have been at the expense of "the quality of education and future of our youth".

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